Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method to improve quality of black and white images of tag-based color imaging systems in a color image path by exploiting resources of otherwise un-utilized channels, comprising:
    a) receiving data processed from an input image;
    b) receiving image analysis tags associated with the pixels of said input image data;
    c) providing said tags to each channel of ~~said~~ an image processing module to control image processing;
    d) performing image processing on said input image data to provide a video signal output thereof;
    e) replicating said video output signal on ~~all~~ otherwise un-utilized output channels of said image processing module, thereby exploiting the resources of said otherwise un-utilized output channels to provide imaging processing functions comprising filters, TRCs, halftoning modules, or rendering methods;
    f) merging each video signal from each of said output channels based on the tags; and
    g) outputting said merged video signal.

2. (Currently Amended) A method to improve image quality as in **claim 1** wherein the tags ~~are determined from one or more~~ indicate at least one characteristics of the image that are determined through segmentation.

3. (Original) A method to improve image quality as in **claim 1** wherein the received data processed from said input image is obtained from a memory.

4. (Original) A method to improve image quality as in **claim 1** wherein said tags are generated in an image analysis module.

5. (Original) A method to improve image quality as in **claim 4** wherein said tags describe for each pixel its classification (e.g., continuous tone, low frequency halftone, high frequency halftone, text, etc).

6. (Original) A method to improve image quality as in **claim 1** wherein said image processing includes filtering, Tonal Reproduction Curves or TRCs, and rendering based.

7. (Currently Amended) A method to improve image quality as in **claim 1** wherein different de-screen filters with ~~various~~ cut-off frequencies and enhancement filters are applied to the image based on pixel classification.

8. (Original) A method to improve image quality as in **claim 1** wherein said image processing comprises multiple resources to enhance image quality.

9. (Original) A method to improve image quality as in **claim 1** wherein additional channel modes are utilized in a CMYK image path for processing in 3-channel color space.

10. (Original) A method to improve image quality as in **claim 1** wherein a 4^{th} channel provides resources for the luminance channel.

11. (Original) A method to improve image quality as in **claim 1** wherein additional channel modes are utilized in a color image path for processing in 1-channel Black and White mode.

12. (Currently Amended) A system for improving the quality of black and white images in a color image path of tag-bases color imaging systems by exploiting resources of otherwise un-utilized channels, comprising:

at least one processor in communication with a storage device;

sufficient software and hardware to perform:

a) receiving data processed from an input image;

b) receiving image analysis tags associated with the pixels of said input image data;

c) providing said tags to each channel of ~~said~~ an image processing module to control image processing;

d) performing image processing on said input image data to provide a video signal output thereof;

e) replicating said video output signal on ~~all~~ otherwise un-utilized output channels of said image processing module, thereby exploiting the resources of said otherwise un-utilized output channels to provide imaging processing functions comprising filters, TRCs, halftoning modules, or rendering methods;

f) merging each video signal from each of said output channels based on the tags; and

g) outputting said merged video signal on; and

h) a device for rendering said merged video signal.

13. (Currently Amended) A system for improving image quality as in **claim 12** wherein the tags ~~are determined from one or more~~ indicate at least one ~~characteristics~~ characteristic of the image that is determined through segmentation.

14. (Previously Presented) A system for improving image quality as in **claim 12** wherein the received data processed from said input image is obtained from a memory.

15. (Previously Presented) A system for improving image quality as in **claim 12** wherein said tags are generated in an image analysis module.

16. (Original) A system for improving image quality in **claim 15** wherein said tags describe for each pixel its classification (e.g., continuous tone, low frequency halftone, high frequency halftone, text, etc).

17. (Previously Presented) A system for improving image quality in **claim 12** wherein said image processing includes filtering, Tonal Reproduction Curves or TRCs, and rendering based.

18. (Currently Amended) A system for improving image quality in **claim 12** wherein different de-screen filters with ~~various~~ cut-off frequencies and enhancement filters are applied to the image based on pixel classification.

19. (Previously Presented) A system for improving image quality in **claim 12** wherein said image processing comprises multiple resources to enhance image quality.

20. (Previously Presented) A system for improving image quality in **claim 12** wherein additional channel modes are utilized in a CMYK image path for processing in 3-channel color space.

21. (Previously Presented) A system for improving image quality in **claim 12** wherein a 4th channel provides resources for the luminance channel.

22. (Previously Presented) A system for improving image quality in **claim 12** wherein additional channel modes are utilized in a color image path for processing in 1-channel Black and White mode.